



North Las Vegas Building and Fire Safety

2250 N. Las Vegas Blvd., Ste. 14 North Las Vegas, NV 89030 702-633-2615 Fax 702-633-2229

High Piled Storage Supplemental Sheet

IS A RACKING SYSTEM BEING INSTALLED? _____

WHAT IS THE STORAGE AREA, IN SQUARE FEET? _____

WHAT IS THE HEIGHT OF THE STORAGE RACKS? _____

WHAT IS THE LINEAL FOOTAGE OF THE STORAGE? _____

	Class Parameters-	Area Parameters- (Check only one appropriate box. For mixed commodities, select the most restrictive.)	
	CLASS I, II, or III	UNDER 12,000 SQUARE FEET HIGH PILED/RACK/SHELF <input type="checkbox"/>	
		OVER 12,000 SQUARE FEET HIGH PILED/RACK/SHELF <input type="checkbox"/>	
	CLASS IV	UNDER 12,000 SQUARE FEET HIGH PILED/RACK/SHELF <input type="checkbox"/>	
		OVER 12,000 SQUARE FEET HIGH PILED/RACK/SHELF <input type="checkbox"/>	
	HIGH HAZARD	UNDER 2,500 SQUARE FEET HIGH PILED/RACK/SHELF <input type="checkbox"/>	
		OVER 2,500 SQUARE FEET HIGH PILED/RACK/SHELF <input type="checkbox"/>	

TENANT Name & Address: (Failure to provide contact information will result in delayed processing).

Business Name: _____
 Street: _____
 Suite / Unit: _____
 City, State, Zip: _____
 Phone & Fax: _____
 Email _____

A FIRE PERMIT FOR HIGH-PILED STORAGE is required to use any building or portion thereof as a high-piled storage area (an area within a building which is designated, intended, proposed or actually used for high piled, shelf, or rack combustible storage) exceeding 500 square feet. **HIGH-PILED COMBUSTIBLE STORAGE** is defined as storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet in height. High-piled combustible storage also includes certain high hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet in height. **SEE THE BACK OF THIS FORM FOR ADDITIONAL INFORMATION.**

Classification of Commodities (See International Fire Code Chapter 32 for detailed information):

Class I: Class I commodities are essentially noncombustible products on wooden or nonexpanded polyethylene solid deck pallets, in ordinary corrugated cartons with or without single-thickness dividers, or in ordinary paper wrappings with or without pallets. Examples of Class I commodities: Appliances; cement in bags; frozen foods; noncombustible metal products.

Class II: Class II commodities are Class I products in slatted wooden crates, solid wooden boxes, multiple-thickness paperboard carton or equivalent combustible packaging material with or without pallets. Examples of Class II commodities: Foods in combustible containers; incandescent or fluorescent light bulbs in cartons; thinly coated fine wire on reels or in cartons.

Class III: Class III commodities are commodities of wood, paper, natural fiber cloth, or Group C plastics or products thereof, with or without pallets. Products are allowed to contain limited amounts of Group A or B plastics, such as metal bicycles with plastic handles, pedals, seats and tires. Examples of Class III commodities: Aerosol, Level 1; food in plastic containers, paper, pillows.

Class IV: Class IV commodities are Class I, II or III products containing Group A plastic in ordinary corrugated cartons and Classes I, II and III products, with Group A plastic packaging with or without pallets. Group B plastics and free-flowing Group A plastic are also included in this class. Examples of Class IV commodities: Aerosol, Level 2; combustible metal products; furniture, plastic upholstered; furniture, wood or metal with plastic covering and padding; pharmaceutical; paints in combustible containers.

High Hazard: High hazard commodities are high-hazard products presenting special fire hazards beyond those of Class I, II, III or IV. Examples of high-hazard commodities: rubber tires, Group A plastics, flammable liquids, idle pallets, where the top of storage is greater than 6 feet in height; Aerosol, Level 3; commodities of any class in plastic containers; mattresses.

2018 International Fire Code 3201.3 Construction documents. At the time of building permit application for new structures designed to accommodate high-piled storage or for requesting a change of occupancy/use, and at the time of application for a storage permit, plans and specifications shall be submitted for review and approval. In addition to the information required by the International Building Code, the storage permit submittal shall include the information specified in this section. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location. The plans shall include the following:

1. Floor plan of the building showing locations and dimensions of high-piled storage areas.
2. Usable storage height for each storage area
3. Number of tiers within each rack, if applicable.
4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.
5. Aisle dimensions between storage array.
6. Maximum pile volume for each storage array.
7. Location and classification of commodities in accordance with Section 3203.
8. Location of commodities which are banded or encapsulated.
9. Location of required fire department access doors.
10. Type of fire suppression and fire detection systems.
 - a. For density/area fire sprinklers protecting the high-piled storage area, indicate the sprinkler identification number (SIN), the sprinkler k factor, square footage of the remote area, and the system design density. If the SIN is not available, a copy of the manufacturer specification sheet for the sprinkler head is required.
 - b. For specific application sprinklers, such as large-drop and ESFR sprinklers, protecting the high-piled storage area, indicate the sprinkler identification number (SIN), the sprinkler k factor, the number of sprinkler heads in the remote area, and the minimum residual pressure provided at the most hydraulically demanding sprinkler head. If the SIN is not available, a copy of the manufacturer specification sheet for the sprinkler head is required.
11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.
12. Type, location, and specifications of smoke removal and curtain board systems.
13. Dimension and location of transverse and longitudinal flue spaces.
14. Additional information regarding design features, commodities, storage arrangement and fire protection features within the high-piled storage area shall be provided at the time of permit, when required by the fire code official.
15. Type of shelving material used, whether it is solid, slatted, or wire mesh.
16. Verification of sufficient fire flow provided for the building.

Additional submittal requirements:

1. 3 sets of floor plans showing locations and dimensions of high-piled storage areas – 2 stamped and signed.
2. 2 sets of structural calculations – stamped and signed.
3. 2 sets of manufacturer's designs.
4. Number of tiers within each rack.
5. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.
6. Location, classifications, and description of commodities.
7. Aisle dimensions between each storage array.
8. Location of required fire department access doors.
9. Type of fire-suppression and fire-detection systems showing specific fire sprinkler system design.
10. Location of valves controlling the water supply of ceiling and in-rack sprinklers.
11. Completed building application with supplemental sheet.